# Take Test: Lab 4 Quiz

## Test Information

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|---|---|
| Description | This quiz covers topics related to Lab 4. The questions cover: requirements, hardware and software details, as well as implementation details. |
| Instructions | You are allowed multiple attempts before the due date. You must submit your last attempt before the due date. If you start an attempt, you must submit otherwise you will not get a grade for the quiz. |
| Multiple Attempts | This test allows multiple attempts. |
| Force Completion | This test can be saved and resumed later. |

## QUESTION 1

**10 points** Saved

What is the maximum division for a PBCLK input into a timer?

- (•) 256
- ( ) 128
- ( ) 512
- ( )

64

**QUESTION 2** **5 points** Saved

In the lecture videos for Lab 4, the interrupt flag must be cleared when configuring the interrupt controller.

- (•) True
- ( ) False

**QUESTION 3** **10 points** Saved

How often should LED1 toggle?

- ( ) Every 2 seconds
- ( ) Every 1 second
- (•) Every 0.5 seconds
- ( ) Every 4 seconds

**QUESTION 4** **10 points** Saved

How often should LED4 toggle?

- ( ) Every 0.5 seconds
- (•) Every 4 seconds
- ( ) Every 2 seconds
- ( ) Every 1 second

## QUESTION 5

5 points Saved

,In the lecture videos for Lab 4, the interrupt flag does not need to be manually cleared when exiting an ISR.

- ○ True
- ◉ False

## QUESTION 6

10 points Saved

What frequency does PBCLK operate at?

- ○ 80MHz
- ○ 32.768MHz
- ○ 20MHz
- ◉ 10MHz

## QUESTION 7

10 points Saved

In the lecture videos for Lab 4, where is the raw_ count incremented?

- ◉ In an ISR
- ○ In the .data section
- ○ In a subroutine
- ○ In the main routine

## QUESTION 8

10 points Saved

What is the maximum count for timer 1?

- 4294967295
- 4294967296
- (•) 65,535
- 65,536

## QUESTION 9

10 points Saved

What is the period for once cycle of PBCLK when divided by 256?

- 7.8125uS
- 3.2uS
- (•) 25.6uS
- 12.8uS

## QUESTION 10

10 points Saved

How often should the counter that counts from 0 to 255 increment?

- (•) Every 1 second
- Every 2 seconds
- Every 4 seconds

Every 0.5 seconds

## QUESTION 11

10 points Saved

In the lecture videos for Lab 4, what is the timing method used to generate a 2Hz signal?

The DelayMs( ) function

Timer 2 interrupts

PBCLK with a divider circuit

Timer 1 interrupts

Question Completion Status:

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

In the lecture videos for Lab 4, the interrupts are single-vectored.

True

False

## QUESTION 13

10 points Saved

On which output pin is LED4?

RG14

RG13

RG15

RG12

**QUESTION 14** **10 points** Saved

In the lecture videos for Lab 4, how is a one second pulse sent to LEDs?

- (•) By dividing the 2Hz signal generated using timer 1.
- ( ) Using timer 2
- ( ) By dividing PBCLK by 256
- ( ) By dividing PBCLK by 512

**QUESTION 15** **5 points** Saved

What size timer must be used for a 10 second interval when dividing by 256?

- ( ) 8 Bit
- (•) 32 Bit
- ( ) 64 Bit
- ( ) 16 Bit

*Click Save and Submit to save and submit. Click Save All Answers to save all answers.*

Save All Answers Save and Submit